

RACEPOINT INMEDIA REPORT

CHINA'S 2020 VISION

Asserting Global Technology Leadership



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CHINA'S 13TH FIVE-YEAR PLAN

TECHNOLOGY TO THE FORE



In March 2016, Chinese lawmakers ratified the 13th Five-Year Plan at the annual sessions of the National People's Congress (NPC) and Chinese People's Political Consultative Conference (CPPCC) in Beijing, finalizing the blueprint for the nation's political and economic development from 2016 to 2020.

The new Five-Year Plan included major new policies for the technology industry in China, including programs under the Internet Plus initiative, as the Chinese government promotes innovation and entrepreneurship to create a knowledge-based economy, and commits to industry leadership in cutting-edge technologies such as 5G wireless communications. Green technology continues to remain a priority for the Chinese government with the implementation of the 'energy revolution'. Premier Li Keqiang also identified artificial intelligence as a key next-generation information technology that will be the focus of research.

These policies will become hot topics of conversations not only in China but across the globe. Racepoint Global teams in Beijing, Shanghai and Hong Kong closely followed proceedings as lawmakers debated the new Five-Year Plan, and developed unique insights and perspectives to help marketers understand how best to capture exciting new opportunities in China that will drive growth in the world of technology in the next five years and beyond.





China, the world's biggest Internet market by users, is stepping up plans to integrate connected services into everyday life and economic activities. The overarching "Internet Plus" program, first launched in March 2015, seeks to promote innovation and boost the economy by bringing internet connectivity to all areas of daily consumer life as well as across all industrial sectors. Through the integration of big data, the Internet of Things, and mobile internet, the government's ultimate goal is to inject greater efficiency and innovation into traditional industries such as manufacturing, healthcare, education, logistics, and government.¹ Following the ascent of China's e-commerce

INTERNET-ENABLED INNOVATION IS SET TO PLAY A MAJOR ROLE IN FUELING CHINA'S ECONOMIC GROWTH, AFTER THE DRAFT OUTLINE OF THE 13TH FIVE-YEAR PLAN (2016-20) INDICATED THAT THE CENTRAL GOVERNMENT IS PLACING STRONG EMPHASIS ON THE DEVELOPMENT OF THE WEB-BASED ECONOMY.

China Daily¹

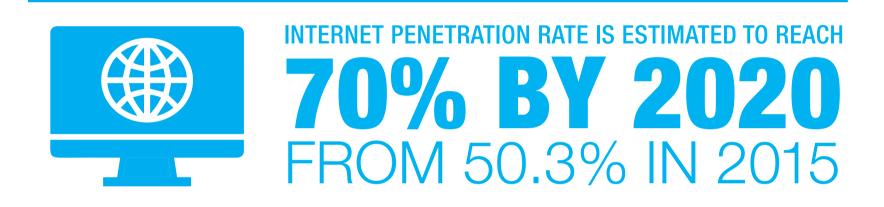
giants such as Alibaba and JD.com, a key focus in the new 13th Five-Year Plan is to mirror the impact Internet has had on the retail sector across less technologically-advanced sectors.

At the infrastructure level, there will be a continued push to advance Internet infrastructure across the country to empower China's people, especially those

¹ Shao Zhiqing, NPC Member, Deputy Director of Shanghai Economic and Informatization Commission: The Integration of Informatization and Industrialization Will Be the Key of 'China Manufacturing 2025'

in rural areas, through access to the Internet and the knowledge economy. The Chinese government has set ambitious targets for higher penetration of fiber-optic network infrastructure in cities and villages nationally, delivering increased network connectivity and data speeds to urban and rural areas.

By 2020, the central government is targeting to expand fiber-optic network coverage to all cities to provide access speeds of over 1Gbps, and ensure that all households in larger cities have access to 100Mbps networks, according to the 13th Five-Year Plan. The government has also set a goal to increase fiber-optic network penetration of smaller towns and villages to 98% nationally to provide broadband networks with 50Mbps access speeds to more than half of rural households by 2020.



Xiaomi Founder and CEO Lei Jun, a NPC delegate, is a vocal proponent of bringing connectivity to rural areas. He said that China's rural areas are bursting with opportunities for IT-driven innovation and entrepreneurship. Internet businesses run from rural areas are expected to follow mobile Internet as the 'next big thing' and will bring golden opportunities over the next 10 years. By 2020, China's Internet penetration rate is estimated to reach 70%, from 50.3% in 2015.²

China will publish detailed policies for "Made in China 2025" to set out the government's plans to integrate Internet technology to increase industrial productivity and efficiency, Miao Wei, Vice Minister of Industry and Information Technology, said at this year's NPC session.

² http://www.chinadailyasia.com/chinafocus/2016-03/08/content_15395975.html

ENTREPRENEURSHIP 8. INNOVATION



According to Xinhua, 'Innovation' was the third most popular buzz phrase of the National People's Congress in 2016, just behind 'Poverty Alleviation' and 'Green Development'. This reflects the importance the government has placed on transforming the economic growth model away from being dependent on trade and foreign investment towards one based on local innovation.

INNOVATION IS THE PRIMARY DRIVING FORCE FOR DEVELOPMENT AND MUST OCCUPY A CENTRAL PLACE IN CHINA'S DEVELOPMENT STRATEGY – China Daily²

Support for innovation comes right from the top. Premier Li said, "Innovation is the primary driving force for development and must occupy a central place

in China's development strategy." Xi Jinping, General Secretary of the Communist Party of China, told the Shanghai Delegation Conference that the city should spearhead innovation in China that has global influence. There were also calls from the sidelines for Chinese entrepreneurs to start thinking about taking on global markets, rather than being satisfied with local user bases.

² http://www.chinadailyasia.com/chinafocus/2016-03/08/content_15395975.html

In an address to the (CPPCC) National Committee, Wang Zhibiao, part of the National Development and Reform Commission, said that even though innovation incubators are springing up across China, the focus thus far has been too much on quantity rather than quality, pointing out a distinct lack of high-tech projects and disruptive innovation. Wang also pointed out that despite more than 2,000 policies to help new businesses, around 90% of startups surveyed in 2015 had no idea that such policies exist and called for greater policy transparency and cutting of red tape.

OF CHINESE STARTUPS SAY 2016 WILL BE BETTER THAN 2015 COMPARED TO ONLY 64% OF U.S. STARTUPS

Thriving entrepreneurship was also identified as essential to employ the millions of fresh college graduates—with high expectations—that are entering the job market each year. Yuan Guiren, China's education minister, told media that the economic slowdown would create additional pressure for graduate job seekers and that China needed to count on entrepreneurship to help drive job creation.

Despite concerns that entrepreneurship in China is falling behind other markets due to a number of factors that include a less diverse talent pool and weaker government support in the past, startups in China remain positive about the future. According to Silicon Valley Bank's China Startup Outlook Report 2016, 85% of Chinese startups say 2016 will be better than 2015, compared to only 64% of U.S. startups. The report also said that 65% of startups are confident that the innovation economy will continue to grow in 2016.

NEXT-GENERATION



China's 13th Five-Year Plan included new programs to build high-quality and secure national telecommunications network infrastructure to support the next phase of economic development in the country. The Chinese government has detailed initiatives to deploy next-generation technologies including 5G wireless communications networks.

Chinese technology companies including Huawei Technologies, one of the world's biggest providers of telecommunications network equipment and solutions, has been among the earliest developers of 5G networks, which promise data transmission rates that are hundreds of times higher than current networks based on 4G LTE technology. Chinese telecommunications carriers including China Mobile have been collaborating with counterparts in Japan and South Korea on 5G research to drive the early adoption of 5G in the North Asia region.



THE CENTRAL CHINESE GOVERNMENT

IS TARGETING TO ROLL OUT 5G NETWORK SERVICES TO THE PUBLIC BY 2020

Upgrading the nation's telecommunications infrastructure will help sustain industrial and economic development, in addition to pan-regional policy initiatives under the "One Belt One Road" Blueprint, according to the 13th Five-Year Plan.

To promote policy initiatives including "Internet Plus", the central government also set targets for Wi-Fi network coverage nationally to ensure residents and businesses across the country have reliable access to Internet connectivity.





In succession to the 12th five-year plan released in 2011, the new five-year plan has put greater emphasis on promoting green development in China. Premier Li has urged the government to make environmental governance efforts and move faster to achieve breakthroughs in green technology. In terms of its current status, the Chinese government has been investing over \$50 billion per year in clean energy development since 2009, aiming to develop alternative energy vehicles and pollution-reducing technology as well as the green-building area.³

Although it has become one of the world leaders in green technology development with its ambitious targets, China still faces severe environmental problems such as air pollution. The main factor of this phenomenon is that China consumes the largest amount of coal globally and has done very little to control the emissions produced by coal-fired power stations. Regarding this aspect, Chinese President Xi Jinping proclaimed the implementation of 'energy revolution', to decrease China's reliance on fossil fuels and increase the usage of renewable energy, which may fill the energy demand gap and achieve the climate goals at the same time.⁴

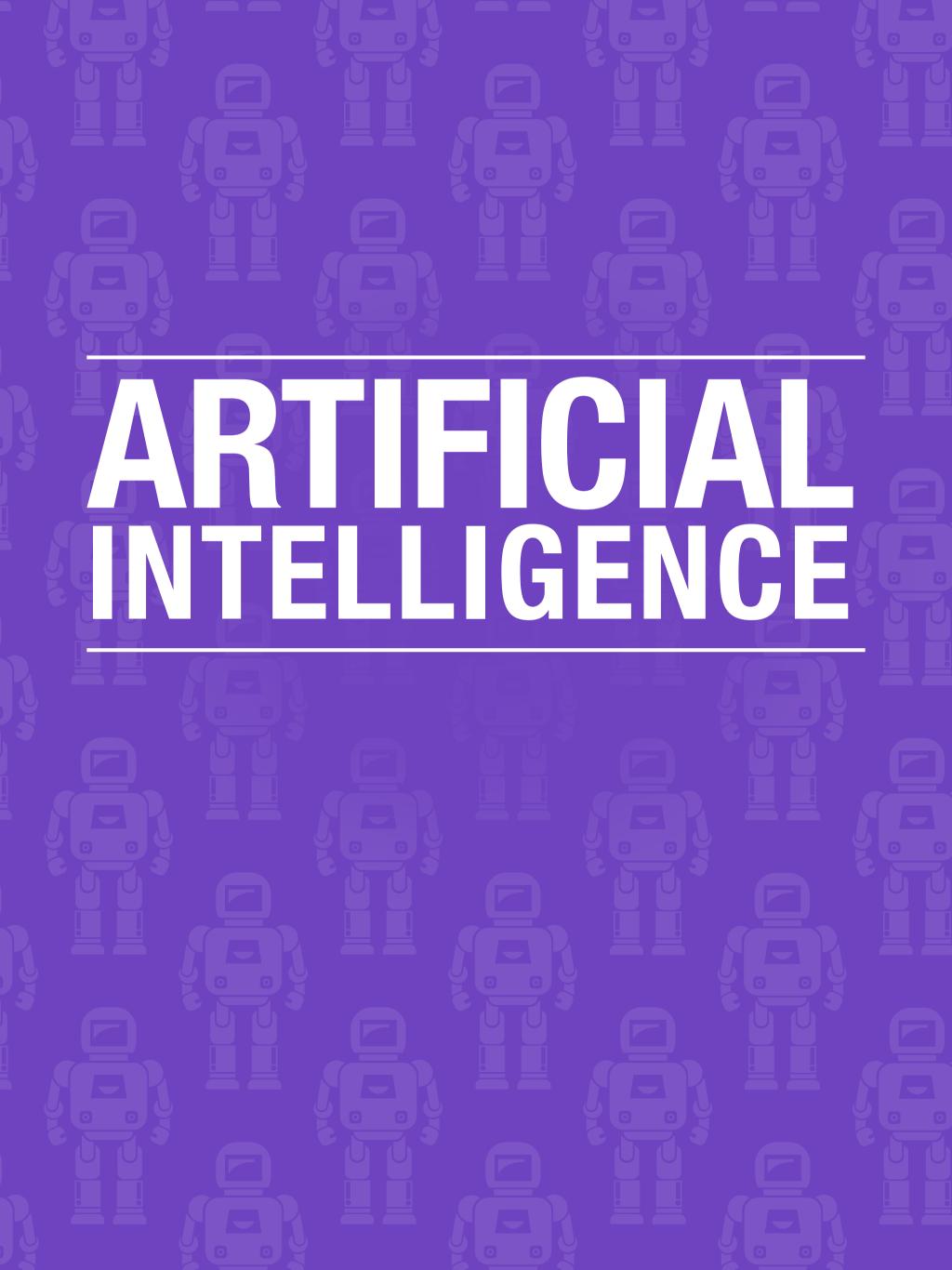
³ http://www.esi-africa.com/news/china-spends-us-50-billion-a-year-on-renewable-energy/

⁴ https://www.uschina.org/three-reform-strategies-behind-xi%E2%80%99s-energy-revolution



With 'innovation' as one of the key theme in the 13th five-year plan, many professionals perceive green technology as a promising opportunity for China to change the paradigm of its energy landscape. To achieve the right public-private partnerships and smart investments for green alternatives, it is expected that there will be stronger engagement among green technology companies, investors and government—the government claimed to invest \$2.5 trillion on clean energy projects in the next 15 years and also to support alternative energy firms in the country. China's increased investment in the clean energy sector indicates more opportunities for related institutions or companies as shown in the case of BYD, an automobile manufacturer that made contracts to build electric buses for public transportation in China.⁶

⁶ http://www.forbes.com/sites/kenrapoza/2015/08/11/china-to-spend-trillions-on-green-tech/#78fcfdd26356





Artificial Intelligence was thrust into the limelight during this years conversations, as fascinated delegates combined their activities at the conference with regular monitoring of unfolding events in Seoul, where the AlphaGo computer program surprisingly defeated Go World Champion Lee Sedol in a 5-game match that captured public imagination around the world about the ascendancy of computing power and machine learning.

The 13th 5-Year Plan identified artificial intelligence as a key next-generation information technology that will be the focus of research nationally, alongside other growth areas including 5G wireless communications, wearables, advanced sensors, semiconductors and integrated circuits. The importance of artificial intelligence in the Chinese government's national blueprint for technology was elevated following years of private-sector research efforts led by companies including Alibaba, Baidu, Tencent and iFLYTEK.

iFLYTEK, a Chinese speech-recognition technology company that is increasing investment in research to integrate artificial intelligence and machine learning into its products and services, recently received a major boost, sealing a partnership with U.S. technology giant IBM. The Chinese government should make artificial intelligence research a key national priority by fostering closer partnerships between private-sector and academic institutions, following the model in North America and Europe, iFLYTEK President Liu Qinfeng said in an address to the NPC this year.



CHINA HAS AN OPPORTUNITY TO BE A WORLD-LEADER IN ARTIFICIAL INTELLIGENCE

Baidu, operator of China's most-popular Internet search engine, has been a pioneer in artificial intelligence research globally. At the CPPCC in 2015, Baidu Founder and CEO Robin Li made a presentation to delegates on the "China Brain" project, a research program on speech-recognition and machine-learning to spearhead the nation's drive to be a global leader in artificial intelligence. The Internet entrepreneur likened the China Brain initiative to the U.S.'s Apollo space exploration program in scale and potential to advance the nations scientific and technology capabilities.

Robin Li is continuing to drive Baidu's expansion in the global artificial intelligence space, as the Chinese company announced plans in March 2016 to test its self-driving electric vehicles in the U.S., where it has been on a recruitment spree to hire top Silicon Valley talent, including Chief Scientist Andrew Ng, a former executive at Google.

China has an opportunity to be a world-leader in artificial intelligence as companies and universities focus on the deployment of technologies such as machine learning, robotics and self-driving vehicles in Internet services, manufacturing and transportation, Huai Jinpeng, Vice Minister of Industry and Information Technology, said at a panel discussion at this year's NPC.

³² http://blogs.cfr.org/cyber/2015/02/02/what-to-do-about-chinas-new-cybersecurity-regulations/

KEY TAKEAWAYS FOR TECHNOLOGY MARKETERS



The 13th Five-Year Plan will foster new partnerships and increased collaboration between entrepreneurs and innovators in China and their counterparts in North America, Europe and Asia, helping the Chinese economy navigate slowing growth and transition to a new model. As Chinese companies become world leaders, key centers such as Beijing and Shenzhen will drive conversations that will reshape the global technology industry. Technology marketers need to monitor the latest market intelligence in China, in addition to news streams from Silicon Valley and the Silicon Roundabout.

The critical importance of technology in China's new economy is creating new growth drivers for global technology companies including Apple and Samsung, which both entered the mobile payment market in China this year to bring new choices to Chinese consumers, fuelling innovations in a market where Alipay and WeChat held sway. The new Five-Year Plan will create new openings in China for western technology companies, dispelling concerns about favoritism for domestic brands.

As government policies including Internet Plus and "One Belt One Road" encourage more Chinese technology companies to expand their international footprint, technology companies in North America, Europe and other parts of Asia will benefit from new opportunities to partner with Chinese technology leaders. Alibaba Group, China's biggest E-Commerce company, this year increased its investment in U.S. firm Groupon, while leading Chinese White-Goods maker Haier announced plans to acquire the appliances unit of General Electric in January.

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